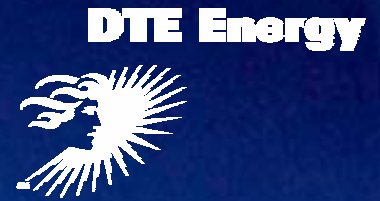


DTE's Distributed Generation Experience



California Energy Commission
April 29, 2005

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Agenda – Customer agreements

- **Distribution Solutions**
 - Utility Owned Customer sited
 - Overview of siting
 - Agreement summary
 - Customer Owned Utility Lease
- **Customer Premium Power - Utility Owned**
 - Structure
 - Utility Benefits
 - Customer Benefits
 - Agreement Summary

Distribution Solutions

Utility Owned



Siting & Approval Process



“the sales presentation”



Planning - Definitions

Emergency - immediate relief of an emergency problem using our portable generator or a leased unit. Should also include circuit specific interruptible load to manage loading under emergency.

Explore known customer generation for emergency help.

Temporary - relief of a problem using leased or purchased DG to return levels to within planning criteria, should last for 1 to 4 years. The generator as well as circuit specific interruptible load should be used to manage that level.

Partnering with customers for siting of DG.

Explore known customer generation for help.

Permanent - relief of a problem that returns loading to below criteria for an estimated 5 years.

- Try to get the message out to communities, customers, DEQ, PSC, etc. that **electricity is an essential service and that utilities have a mandate to serve.**
- The emergency and temporary installations are special circumstances that should be given different treatment, at minimum faster responses.
- Speak with a common voice
 - Enlist other state utilities
 - Offer to give them contacts of others who have agreed with this position.



Siting

- **At the Substation (We own the land)**
- **Remote from substation is the best**
- **Look for Larger Customers**
- **Have Access to 3-phase power**
- **Aesthetic Consideration (Obscure for both sight and sound)**
- **Available 55' x 32' footprint**
- **Schools, churches, Airports, Municipal yards, Water & Sewer, Gas compressor stations, Armed Services, Medical facility, Governmental and Community properties, larger industrial and commercial, Etc.**
- **Access to Nat. Gas**

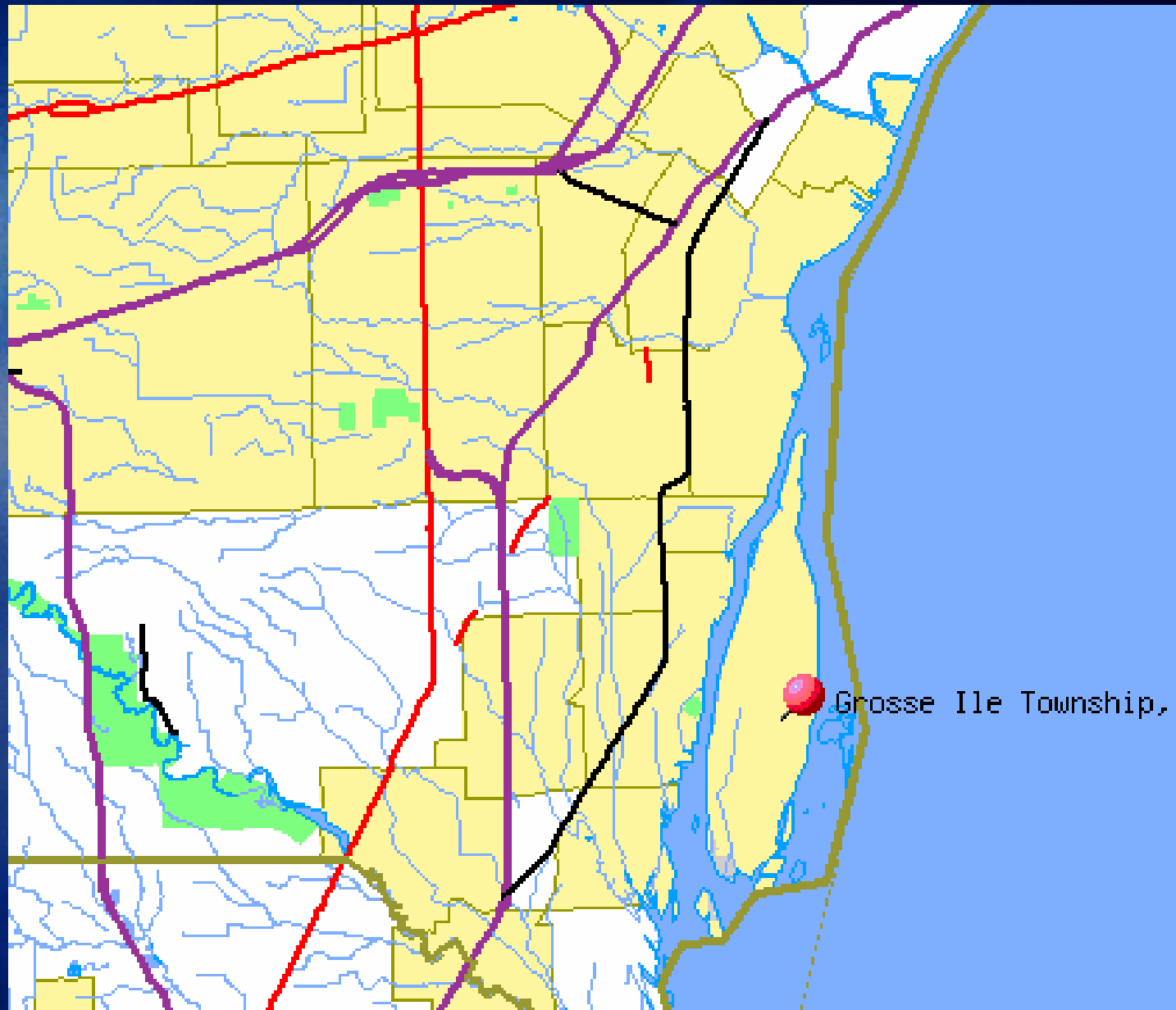


Michigan

Grosse Ile



Grosse Ile School and Area





The Presentation to Grosse Ile Schools

*The presentation was made to the School Board
& the community leaders:*

It began with a home made video of other sites

*Note: We were told by the DTE Video Department
“not to quit our day jobs”*

*It ended with a sound demonstration using a Amplifier
and our portable DB Meter*

Grosse Ile Schools

Problem:

Circuit Overload DC2841

Resolution should be:

Remote from substation

At Largest Customer

Have Access to Nat. Gas

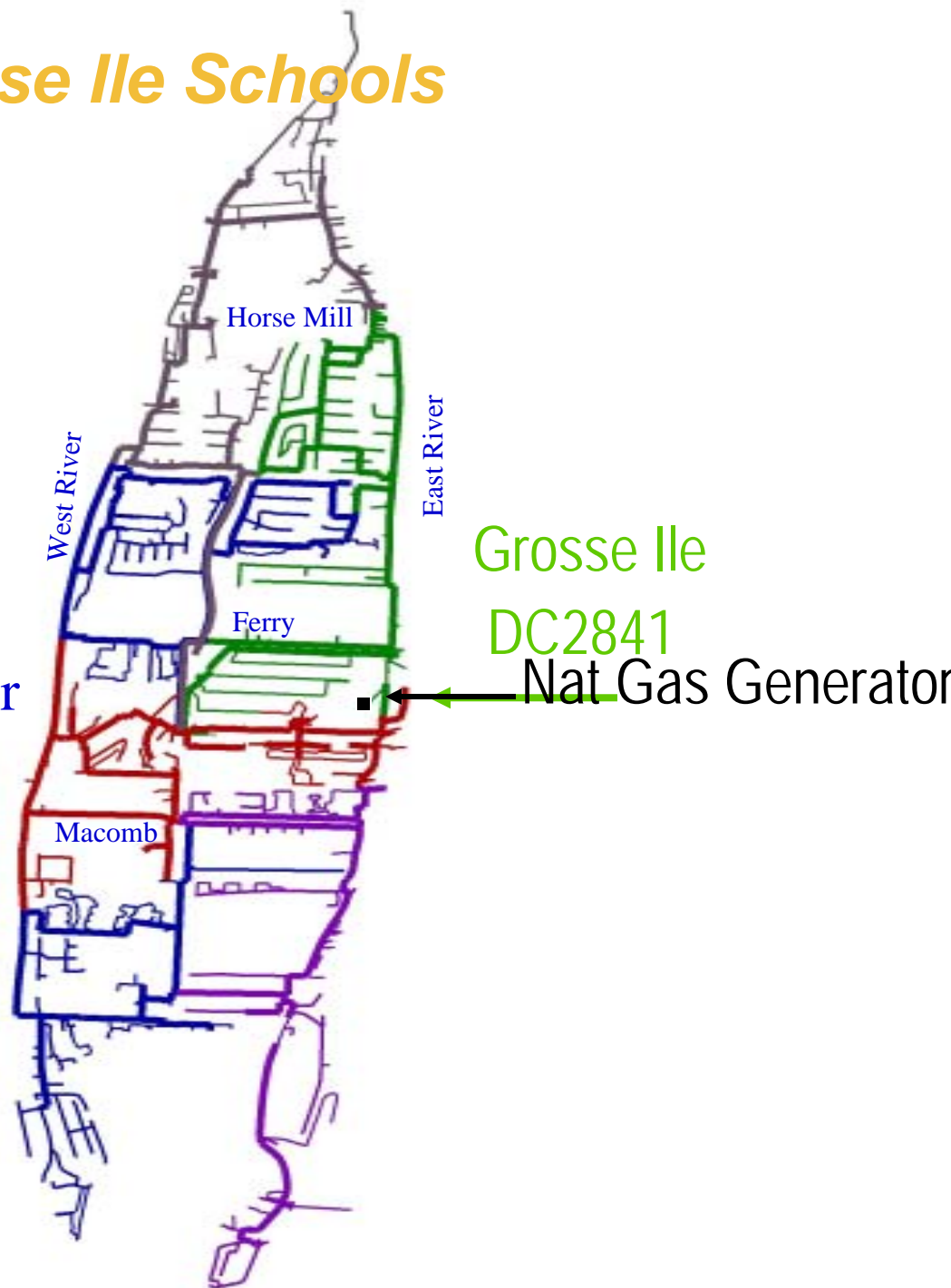
Have Access to 3-phase power

Aesthetic Consideration

(Obscure for both sight

And sound)

Available 55' x 32' footprint



Grosse Ile School and Area



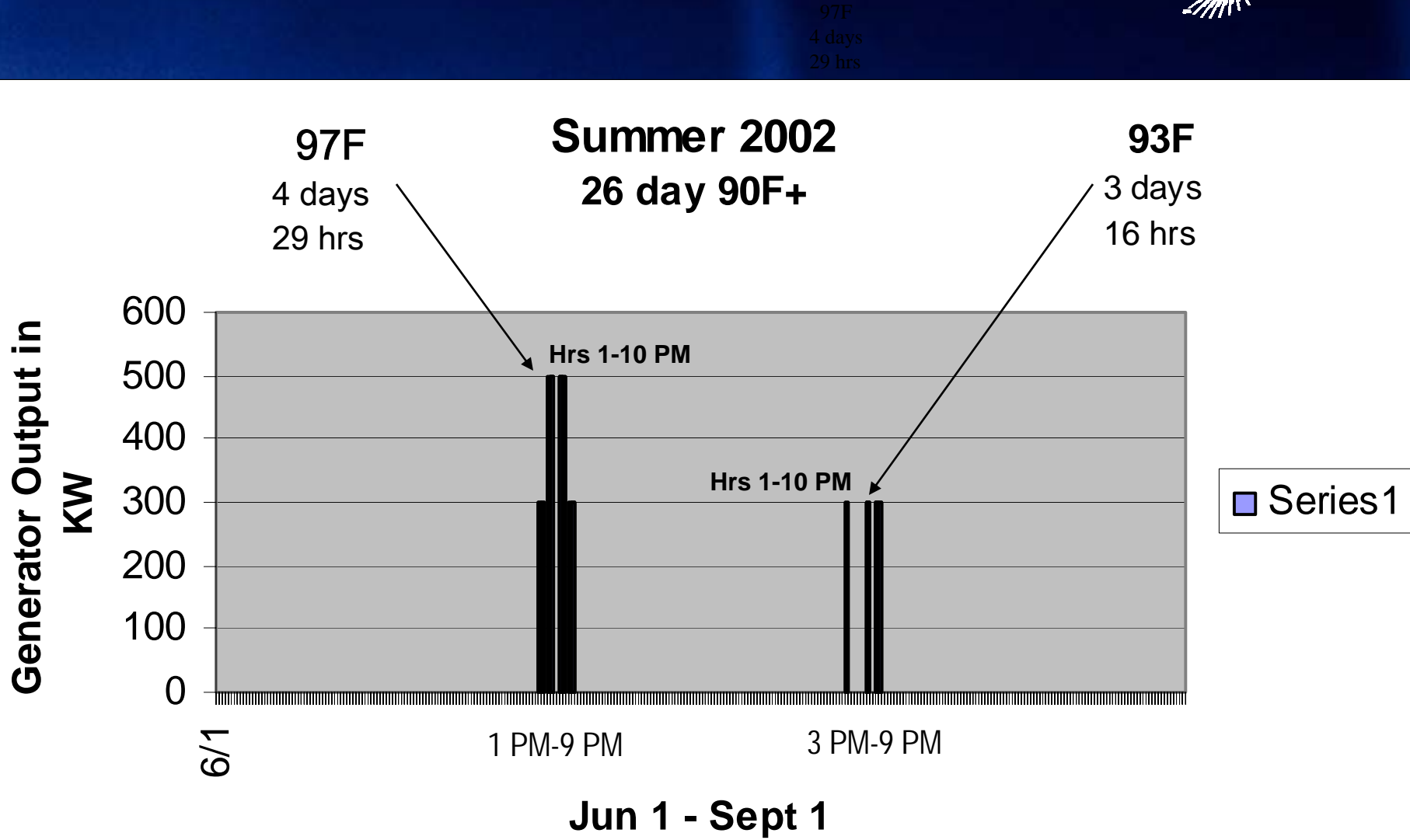


Load Analysis for 2002 Summer

				High
Date	Time	Hours	Day	Temp (oF)
7/1/2002	3pm - 9pm	6	Monday	95
7/2/2002	1pm - 10pm	9	Tuesday	96
7/3/2002	1pm - 9pm	8	Wednesday	97
7/4/2002	1pm - 7pm	6	Thursday	95
7/29/2002	3pm - 4pm	1	Monday	91
7/31/2002	3pm - 9pm	6	Wednesday	93
8/1/2002	1pm - 10pm	9	Thursday	92
	Total Hours	45	Avg Temp	94.1



Probable Run Time and Durations





The Lease

“The great enemy of clear language is insincerity. When there is a gap between one’s real and one’s declared aim, one turns, as it were instinctively, to long words and exhausted idioms, like a cuttlefish (octopus) squirting out ink”

George Orwell, “Politics and the English Language”

Keep it Simple



Copies of our beginning 3 page lease available on request

General Lease (Distribution Solution)

Typical Land Lease

DTE Energy



TERM AND RENT

1. Term
2. Option to Renew
3. Rent

USE AND ENJOYMENT

4. Use
5. Access
6. Quiet Enjoyment

MAINTENANCE

7. Improvements; Alterations

TERMINATION

8. Termination

INDEMNITY

9. Indemnity



General Lease (used for DG)

GENERAL PROVISIONS

10. Entire Agreement

11. Modifications

12. Severability

13. Applicable Law

14. Heading

15. Waivers

16. Successors and Assigns

Lease Payment is negotiated – loosely based on satellite lease payment as well as storage rates per square foot

Distribution Solutions

Customer owned
Utility Leased



General Lease - Customer DG



- **General lease plus**
 - complication of establishing existing condition (like leasing a used car)
- **Additional Equipment**
 - Monitoring, communication and control
 - Closed-transition switching
 - Additional metering
- Establishment of generator base line (inspection including infrared) for current value, condition, and additional required maintenance
- Fuel agreement – Utility to monitor and arrange deliveries fuel cost shared according to use
- Operations & Control Agreement
 - Utility control in Summer high loading
 - Utility run time not to exceed 400 hours
 - Customer control during remainder of year
 - Operations Agreement
 - Required regular maintenance not to exceed 100 hours

Lease Payment is negotiated

Premium Power





Premium Power Structure

- On-site standby generators
- Equipment is installed, owned, operated, & maintained by Detroit Edison
- Standard contract length is seven to ten years; contract continues year-to-year thereafter
- Available to bundled tariff customers only
- 24 hour monitoring through System Operations Center
- Sound-attenuated generator housing
- Critical grade exhaust system
- Enclosed muffler (if available)
- Customer choice of natural gas or diesel
- Closed-transition transfer switch





Benefits to Utility

- May provide needed capacity to reduce constraints
 - Transmission
 - Distribution
- Distribution Planning Tool - **Alternative to second utility feed**
- Increased Customer Satisfaction
- Customer Retention
- Return is based on a portfolio of assets
 - Risk is low and quantified
 - Financial model and assumptions static for all customers
- Standard Contract-minimal negotiations, legal intervention

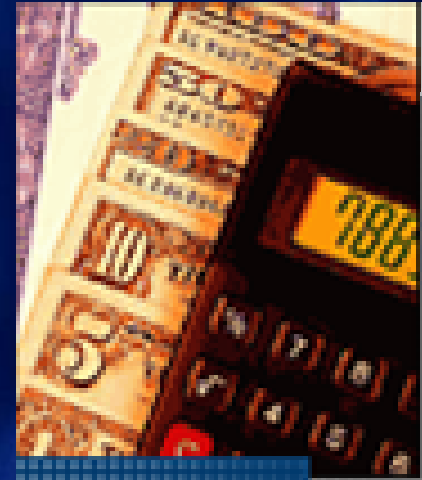


***Customer may be able to capture some of Electric Utility benefits through interruptible tariff**



Customer Benefits - Financial

- Requires no down payment
- Fixed monthly fee: line-item on utility bill
- Accounting treatment as a service
 - Off-balance sheet
 - Not a lease
 - Lowers customer's taxable income
- Property taxes included
- Insurance included
- Eligibility for interruptible electric rate
 - Typical savings of 10-20%
 - Service pays failure to interrupt penalty
- Minimize fuel cost volatility
 - Output metered and sold at standard electric rate
 - Other alternatives
 - Include fuel in monthly fee
 - Use customer fuel



Customer Benefits - Construction & Asset Management

DTE Energy



- Complete turn-key installation
- Air and fuel tank permitting supplied by Detroit Edison
- All city permitting is handled by Detroit Edison
- Customer will be responsible for cost sharing on impacts of future environmental law changes
- Full preventative maintenance program
 - 24-hour monitoring
 - 24-hour service (4 hour response time)
 - Automatic refueling
- All unscheduled or breakdown maintenance is included





Premium Power Agreement

Modeled after redundant service agreement

- Base on standard tariff rider we use a second utility feed.
- We build utilities for you and we will charge you for our cost plus rate of return plus operating expenses with O&M
- It is handled as a service not an operating lease
- The customer treats it as an off balance sheet expense
- Min 7 year agreement with an evergreen clause or customer can elect to end or buy outright
- Utility can negotiate additional sell-back DG
- Customer can move to interruptible rate

Questions

